



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,017	05/14/2002	Christophe Mathieu	Q68461	4517
23373	7590	06/08/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, DZUNG D	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,017

Applicant(s)

MATTHEW ET AL

Examiner

Dzung D. Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/20/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. U.S. patent no. 5,838,477 in view of Marra et al. , Africa One: The Africa Optical Network, IEEE Communication Magazine, Vol. 34, No. 2, February 1996.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. U.S. patent no. 5,838,477.

Regarding claim 1, Yamamoto discloses in the background of the invention a submarine fiber optic transmission network including a single cable (col. 1, line 6) with at least two pairs of fibers (see figure 13, for example, pair of fibers output from optical switch 6 and pair of fibers input to optical switch 7 at terminal B) and having at the end a branching unit (see figures 12 and 13), the branching unit 8 of figure 12 being connected to terminal equipments (e.g., A, B, C of figure 12) by two cable sections (section branching to terminal B and section branching to terminal C) each having at

Art Unit: 2633

least two pairs of fibers (section branching to terminal C having fiber pairs connected to optical couplers 5,9 and 7, 6 and section branching to terminal B having fiber pairs connected to optical switch 6, 7 and 6, 7), each branching unit (see figure 13) switching the fiber pairs of the single cable to two fiber pairs of two cable sections connected to it (for example, fiber that input to optical splitter 5 at station A is branching to optical switch 6 of station B and station C, likewise, fiber that input to optical switch 7 at station B is branching to optical coupler 9 of station B and station C, etc...). Yamamoto differs from claim 1 of the present invention in that he does not specifically disclose the branching unit 14 is connected to each end of the single cable. Marra, from the same field of endeavor, discloses a submarine optical network having the branching unit coupled to each end of the under sea cable (see figure 7). Since branching unit is well known in the art for allowing the optical system to expand into multipoint communication. At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the teaching Marra that is impose the branching unit of Yamamoto at each end of the submarine cable. One of ordinary skill in the art would have been motivated to do this in order to provide the connectivity between all the landline networks and the undersea network. Furthermore, it prevents the system failure due to fiber cut and improves the reliability of the optical system.

3. Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

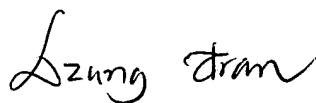
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Schesser et al. U.S. patent no. 6,414,405. Method and apparatus for operating cabled fiber undersea network
 - b. Kawano U.S. patent no. 5,526,157. Optical submarine cable system
 - c. Webb U.S. patent no. 5,655,036. Branching unit for telecommunication optical cable systems

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, appearing to read "Dzung Tran".

Dzung Tran
05/27/2005